ANNALS of PHYSICS

Editor
Herman Feshbach

Assistant Editors
Henry Ehrenreich
Roman W. Jackiw
Arthur M. Jaffe
William H. Press

Editorial Council
J. D. Bjorken
D. Brink
P. G. De Gennes
J. Eisenberg
G. Field
S. Hanna
V. Hughes
L. Kadanoff
B. Mottleson
L. Okun
C. K. N. Patel
J. Peoples, Jr.
E. Picasso
I. I. Shapiro
K. Wilson

Founding Editors
Philip M. Morse
Bernard T. Feld Herman Feshbach Richard Wilson

VOLUME 198 • 1990

ACADEMIC PRESS, INC.
Harcourt Brace Jovanovich, Publishers
San Diego New York Boston
London Sydney Tokyo Toronto

Copyright © 1990 by Academic Press, Inc.

ALL RIGHTS RESERVED

No part of this publication may be reproduced or transmitted in any form or by any means, electron
or mechanical, including photocopy, recording, or any information storage and retrieval system, witho
permission in writing from the copyright owner.

The appearance of the code at the bottom of the first page of an article in this journal indica
the copyright owner's consent that copies of the article may be made for personal or internal use, or f
the personal or internal use of specific clients. This consent is given on the condition, however, that t
copier pay the stated per copy fee through the Copyright Clearance Center, Inc. (27 Congress Stre
Salem, Massachusetts 01970), for copying beyond that permitted by Sections 107 or 108 of the U
Copyright Law. This consent does not extend to other kinds of copying, such as copying for gene
distribution, for advertising or promotional purposes, for creating new collective works, or for resa
Copy fees for pre-1990 articles are as shown on the article title pages; if no fee code appears on the ti
page, the copy fee is the same as for current articles.

0003-4916/90 $7.50

This journal is printed on acid-free paper.

Printed by Catherine Press, Ltd., Brugge, Belgium

CONTENTS OF VOLUME 198

Number 1, February 15, 1990

Carles Ayala and Marià Baig. Strong Coupling Expansions in Pure Lattice Gauge Theory Mixed Actions 1

Jon Magne Leinaas. Quantized Vortex Motion and the Motion of Charged Particles in a Strong Magnetic Field 24

H. Horiuchi. Scattering between Composite Particles Composed of Fermions in the One-Dimensional Delta-Force Model 56

C. Deutsch and G. Naouri. Stepwise Enhancement of Bound Dipoles in Strongly Coupled Plasma 79

M. Moshinsky, C. Quesne, and G. Loyola. Art or Science: The Determination of the Symmetry Lie Algebra for a Hamiltonian with Accidental Degeneracy 103

Y. K. Gambhir, P. Ring, and A. Thimet. Relativistic Mean Field Theory for Finite Nuclei 132

Hong-Mo Chan and Sheung Tsun Tsou. Towards a "Pointless" Generalisation of Yang–Mills Theory 180

Abstracts of Papers to Appear in Future Issues 201

Number 2, March 1990

Derek B. Leinweber. QCD Sum Rule Analysis of Spin–Orbit Splitting in Baryons 203

E. S. Fradkin and V. Ya. Linetsky. Conformal Superalgebras of Higher Spins 252

E. S. Fradkin and V. Ya. Linetsky. A Superconformal Theory of Massless Higher Spin Fields in $D = 2 + 1$ 293

Carl B. Dover and Herman Feshbach. Unitary Symmetry in Baryon–Baryon Scattering 321

D. R. Taylor and P. G. L. Leach. Single Resonance Integrals for Two-Dimensional Hamiltonians 358

Gary R. Goldstein, Michael J. Moravcsik, Leopold Mathelitsch, and Karl Schwarz. Electromagnetic Form Factors from Polarization Experiments 371

Abstracts of Papers to Appear in Future Issues 406

Author Index for Volume 198 408